Verizon 1300 I Street, N.W. Washington, D.C. 20005 Voice 202 336-7892 Fax 202 336-7922 **Shawn Donnelly** Staff Manager – Federal Regulatory



September 1, 2000

Mr. Dale Hatfield Chief – Office of Engineering and Technology Federal Communications Commission 445 12th Street, SW Room 7-C155 Washington, DC 20554

Re: Final Service Outage Report

Dear Mr. Hatfield:

In accordance with the requirements in CC Docket 91-273, enclosed is the Final Service Disruption Report for the Verizon service outage that occurred on August 2, 2000 affecting Passaic, NJ.

Please call me if you have any questions about this report or other service outage issues.

Sincerely,

Enclosure

cc: R. Kimball

Shawn Amnelly

## WIRE LINE OUTAGE REPORTING TEMPLATE

Reporting Carrier	Date of Incident
Verizon	8/2/2000
Time of Incident	Geographic Area Affected
10:23 AM	Passaic, New Jersey
Services Affected	Number of Customers Affected
T / T A T A T A T A T A	90,000
IntraLATA Intraoffice	Number of Blocked Calls
IntraLATA Interoffice X.	300,826
InterLATA Interoffice X	Outage Duration
E911	1 Hr 29 Mins

Background of the Incident

On August 2, 2000 at 10:23 AM, the Passaic Central Office (CO) (PSSCNJPSDS5) became isolated from the Common Channel Signaling 7 (CCS7) network. A Verizon technician was performing work to clear relay rack space for a new SONET multiplexer installation and grounded a 48 volt battery lead. This action blew the fuse in the Battery Distribution Fuse Board (BDFB) causing the four "A" links to fail when a Building Integrated Timing Supply (BITS) timing distribution shelf lost power.

The Network Operations Center (NOC) contacted the technician to help with analyzing the failure. Troubleshooting focused on the loss of the timing to the CCS7 links. An inspection of the BITS equipment did not reveal any equipment or power failures. Switch Tier II Support verified there were no alarms in the switch other than loss of the CCS7 connectivity. A power technician was contacted to check for a building power trouble. At 11:50, the power technician located and replaced the blown fuse at the BDFB. By 11:52, the CCS7 links restored and call processing resumed.

During troubleshooting, it was noted that both the fiber loop convert shelves the technician was working on and the Synchronization Distribution Expander (SDE) that has the A, B and Alarm Battery Supply leads were fed from the same distribution panel. The SDE is the timing distribution shelf that feeds the D4 carrier channel banks for the 4 CCS7 links. When the technician grounded the battery lead, the BDFB 5 amp fuse blew instead of the 3 amp distribution fuse. This caused a loss of power to both the A and B power feeds supporting the SDE. The technician failed to follow the Method of Procedure for this job and did not perform the work in accordance with the Verizon Safe Time Practice.

Direct Cause	
Procedural – Service Provider – Failure to follo	www.standard.nrocedures/documentation
Root Cause	w standard procedures/documentation
Procedural – Service Provider – Failure to follo	ow standard procedures/documentation
Name and Type of Equipment	Specific Part of the Network Involved
Lycont Technologies Lines 2000 DDED	CCS7 Network
Lucent Technologies -Lineage 2000 BDFB	
Model # J85568C-1 Methods Used to Restore Service	
	blown fuse in the BDFB.
Steps Taken to Prevent Recurrence of the Incident	
-	
• A Telephone Equipment Order (TEO) has b	peen issued to diversify the A and B power feeds
for the SDE and to correct the improper fus	peen issued to diversify the A and B power feeds ing and bay alarms on the BDFB.
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<ul> <li>A Telephone Equipment Order (TEO) has been for the SDE and to correct the improper fus</li> <li>A Capacity Creation Request (CCR) will be Evaluation of Best Practices</li> </ul>	peen issued to diversify the A and B power feeds sing and bay alarms on the BDFB. The issued to diversify the SDE timing shelf.
• A Telephone Equipment Order (TEO) has be for the SDE and to correct the improper fus	peen issued to diversify the A and B power feeds ing and bay alarms on the BDFB. e issued to diversify the SDE timing shelf.  C's Network Reliability Council's publication,

Two "Best Practices" recommended by the FCC's Network Reliability Council's publication, June 1993, *A Report to the Nation*, applies to this outage: Section B, Appendix 8, Diversity Requirements for CCS7 Network Interconnect. The recommendation states "under no circumstance are any of the components of one link path to share power sources with components of another path." A second "Best Practice" that applies is: Section B, 5.2.4.5 Scheduled Work Activities. The recommendation states "at a minimum, high risk. Potentially affecting maintenance and growth procedures should be scheduled during weekend and off-hours. Following the NRC recommendations would have prevented this outage.

Contact Person	Telephone Number of Contact Person
Shawn Donnelly	202-336-7892



## BELL ATLANTIC FCC NETWORK DISRUPTION INITIAL REPORT

TICKET #: 99J-AJ4

1.	DATE AND TIME OF INCIDENT: 08/02/2000 10:23:29 AM GEOGRAPHIC AREA AFFECTED: Passic, NJ & Vicinity
	on/Bergen NJ Manager Area
3.	MAXIMUM NUMBER OF CUSTOMERS AFFECTED: 90007
4.	TYPE OF SERVICES AFFECTED:
	RERGENCY-SERVICE MINTERLATA OTHER  TRALATA 500 SERVICES
5.	DURATION OF OUTAGE: 01:29:23
6.	ESTIMATED NUMBER OF BLOCKED CALLS: To be determined at Root Cause Analysis
7A.	TYPE EQUIPMENT: A LINK VENDOR:
7B.	APPARENT OR KNOWN CAUSE OF INCIDENT: Passible timing problem in FT2000 caused SS7 isolation. Blown fuse caused timing problem.
8.	METHOD USED TO RESTORE SERVICE: Fuse replaced
9.	STEPS TAKEN TO PREVENT RECURRENCE: To be determined at Root Cause Analysis
confi	sant to Section 0.459 (b) of the Commission Rules, and for reason set forth below, dentiality is requested for items: on for confidentiality:
	equest to supplement the showing requested by section 0.459 (b) is hereby made and will bitted expeditiously.
Requ	est Supplement:
DATE	AND TIME OF REPORT: 08/02/2000 12:28:02 PM
CONT	ACT AND TELEPHONE #: Marianne Sweeney 973-649-7440
	NOTE: Retention period is 6 Years